Original Article

Attitudes and Awareness about Basic Life Support among Medical School Students in Lahore

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Abstract

Background: The WHO recommends that all healthcare professionals must be equipped with this basic emergency life-saving service and capability. It comprises essential techniques for maintain airway patency, breathing and circulation in life-threatening emergency situations such as drowning, choking etc.

Objective: This study aims to assess the awareness, knowledge and attitudes of medical students regarding basic life support (BLS) in Lahore

Methodology This was descriptive, cross-sectional quantitative study. A total of 300 MBBS students were recruited for this study. A structured pre tested questionnaire from previously published studies was utilized.

Results: In total, 40% of the participants showed sufficient BLS knowledge (score ≥ 6/10). Clinical year students had a higher mean (5.9 ± 1.6) than pre-clinical students (mean 4.1 ± 1.8; p = 0.001). The mean attitude score was 4.2 ± 0.7 overall, reflecting a generally positive attitude toward learning BLS.

Conclusion: The research concludes that although medical students in Lahore have very positive attitudes toward Basic Life Support, their knowledge and hands-on exposure in conducting BLS are low. This deficiency can be overcome by incorporating structured, hands-on, and frequent BLS training sessions into the MBBS course of study. Equipping students with BLS will not only augment their professional capacity but also help greatly to enhance out-of-hospital cardiac arrest and other emergency survival rates in Pakistan.

Keywords: Medical Students, Pakistan, BLS, Life-Saving Service

Introduction

Cardiac Arrest is one of the leading preventable cause of deaths worldwide. Early recognition of problems and early initiation of basic life support (BLS) and Cardiopulmonary Resuscitation (CPR) can significantly improve survival chances (1). The concept of chain of survival emphasizes the importance of immediate help before the arrival of professional medical help. For medical students, BLS is not just theoretically important but it is and essential life-saving skill that must be learned and practiced during the academic years. The WHO recommends that all healthcare professionals must be equipped with this basic emergency life-saving service and capability (2). However, there are still many developing countries like Pakistan who are still inconsistent in incorporating these skills in undergraduate medical curricula. (3). Many studies have shown that although medical students demonstrate positive attitude towards BLS, their actual knowledge and hands on practice are extremely inadequate (4, 5). For medical students, BLS is not just an academic requirement but it is moral responsibility as it comprises essential techniques for maintain airway patency, breathing and circulation in life-threatening emergency situations such as drowning, choking etc. (6).

This study aims to assess the awareness, knowledge and attitudes of medical students regarding basic life support (BLS) in Lahore. The findings will help address the gap in curriculum and propose strategies to integrate BLS in training in undergraduate medical programs.

Materials & Methods

This was descriptive, cross-sectional quantitative study that was conducted between January and March 2025 among undergraduate medical students. A total of 300 MBBS students were recruited for this study. A structured pre tested questionnaire from previously published studies was utilized. It consisted of: demographic data, knowledge section (10 MCQ's) on CPR sequence, compression rate etc. and attitude section (8 items) assessing confidence, importance and willingness to learn was used. Data was analyzed using SPSS 25 version.

Results

Table 1. Demographic Characteristics of participants

Variable	Category	Frequency	%
Gender	Male	120	40
	Female	180	60
Year of study	Pre-clinical (1st and 2nd year)	140	46.7
	Clinical (3rd to 5th year)	160	53.3
Institution	Public	170	56.7
	Private	130	43.3

Table 2. Awareness and Knowledge Level

Knowledge Parameter	%
Recognizing Cardiac Signs	68
Correct CPR	42
Compression Depth	38
Compression Rate	47
Use of AED	33
Average Score	**5.1±1.9**

In total, 40% of the participants showed sufficient BLS knowledge (score ≥ 6/10). Clinical year students had a higher mean (5.9 ± 1.6) than pre-clinical students (mean 4.1 ± 1.8; p = 0.001).

Table 3. Attitudes towards BLS

Statement	%
BLS should be mandatory	89
I feel confident performing CPR	35
I'm willing to attend future BLS workshops	82
Every medical student should be certified in BLS	91

The mean attitude score was 4.2 ± 0.7 overall, reflecting a generally positive attitude toward learning BLS.

Discussion

The research illustrates a striking gap in attitudes and knowledge concerning Basic Life Support among Lahore medical students. Although most respondents showed enthusiasm and appreciated the significance of BLS, only 40% reflected adequate theoretical knowledge and fewer reported confidence in administering CPR.

These results complement previous research in South Asia and Pakistan. A study indicated that 36% of Karachi medical students were able to name the CPR compression ratio correctly (7), whereas another identified that 41% of medical students in India had adequate BLS knowledge (8). The similarity in findings across geographical regions indicates the general lack of formal emergency care education in medical training structures across South Asia (9, 10).

The substantial disparity between pre-clinical and clinical students indicates that familiarity with hospital settings enhances comprehension of BLS concepts indirectly. Still, observation alone is not enough without proper, hands-on training and evaluation. Consistent workshops by qualified instructors, regular refresher sessions, and incorporating simulation-based learning can satisfactorily bridge this gap.

In addition, since the majority of the students indicated readiness for training, there is potential for educational institutions to incorporate AHA-certified BLS courses as part of the curriculum, preferably in the second year of MBBS. This will guarantee all graduates have fundamental life-saving skills when they enter clinical practice.

Conclusion

The research concludes that although medical students in Lahore have very positive attitudes toward Basic Life Support, their knowledge and hands-on exposure in conducting BLS are low. This deficiency can be overcome by incorporating structured, hands-on, and frequent BLS training sessions into the MBBS course of study. Equipping students with BLS will not only augment their professional capacity but also help greatly to enhance out-of-hospital cardiac arrest and other emergency survival rates in Pakistan.

Limitations

The research employed convenience sampling that could compromise generalizability. The assessment of knowledge was through questionnaire and not through the actual performance, hence possibly an overestimation of competence. Longitudinal follow-up and objective skill-based measures should be incorporated in future studies to assess retention of knowledge.

Authors' Contribution:

N.R conceptualized and designed the study, oversaw data interpretation, and contributed to the drafting and critical revision of the manuscript. She approved the final version for publication and takes full responsibility for the integrity of the work.

Conflict of Interest:

Authors declare no conflict of interest.

Funding and Ethics:

This research was self-funded by the author. The study was conducted in accordance with ethical guidelines.

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